Sabine Mauderer: Structural changes in financial markets and implications for monetary policy implementation

Speech by Dr Sabine Mauderer, Member of the Executive Board of the Deutsche Bundesbank, at the DZ Bank International Capital Markets Conference, Frankfurt am Main, 29 August 2019.

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WELCOME & INTRODUCTION

Ladies and gentlemen,

Welcome to the Bundesbank's Regional Office. It's a real treat for me to speak to you today.

"When the going gets tough" - this conference title was wisely chosen by DZ Bank earlier this year.

Looking at the latest ructions in financial markets, the going has already got tough.

"Navigating the challenges" is the order of the day, and not just for market participants.

The same goes for policymakers – especially when it comes to fiscal policy or monetary policy.

As far as central banking is concerned, "navigating the challenges" is broad in scope. It includes drawing the right conclusions from financial market signals.

The relationship between monetary policy and financial markets is not a one-way street.

Stock and bond prices reflect expectations on future growth and inflation, but also on monetary policy.

These market expectations, in turn, provide valuable information for policymakers.

But things have become even more multi-layered. On the one hand we face increasing market complexity and changes. On the other hand we see new players, products and trading patterns.

To be honest, keeping tabs on the relevant changes is anything but easy. We have to keep asking ourselves which elements of change have an impact on monetary policy and which do not.

So what I am going to do is present some of these changes in the first part of my speech.

It would be a bit of a "long shot" to always call them "structural", since their longevity is not entirely clear.

Then I'll use the second part of my remarks to point out what these changes mean for monetary policy implementation.

Admittedly, I'll give you rather a rough sketch than a finished painting, so some items might be left unresolved.

Fortunately, we will have the opportunity to delve a little deeper into some of the issues later on tonight.

But for starters, let's take a look at my selection of recent changes in financial markets.

A-STRUCTURAL CHANGES IN FINANCIAL MARKETS

I based my choice of changes on how strongly they impact on market dynamics.

The first change is a shift in the relative importance of banks and non-banks in the financial system. This is true for the euro area, but also on a more global level.

On the one hand we see a prospering asset management industry and growing financial markets. But on the other hand banks have been reducing the size of their trading books, partly as a result of stricter regulation.

This shift in market forces is not a major issue when times are good and markets are quiet.

But market liquidity can be a bottleneck in times of stress, when many investors are scrambling to square their positions at the same time.

In the past, banks had the balance sheet capacity to absorb a good deal of the assets on offer.

In terms of market functioning, there are strong indications that this kind of buffering mechanism cannot be relied upon anymore, at least not to the same extent.

Market liquidity may evaporate when it is needed most.

The second change is the rise of new players and products within the non-bank financial sector, alongside growing investment demand.

We observe two important developments sometimes framed as diametrically opposed forces: the very active world of high frequency trading (HFT) and the seemingly calm world of passive investment represented by exchange traded funds (ETFs).

The rise of these market players or strategies has a potentially far-reaching impact on how financial markets respond to new information.

HFT improves liquidity under normal market conditions, it would appear. But during cycles of market volatility, this positive effect on market liquidity seems to not only disappear, but even turn negative as a result of directional investment strategies.

The picture is just as mixed for ETFs. Their net effect on market liquidity in a "normal" market environment is positive. But their behaviour under financial stress might also warrant market liquidity concerns – particularly when leverage is part of the game.

Crucially, then, both HFTs and ETFs have a procyclical impact on market liquidity. And we have good reason to assume that their influence is here to stay.

Let us look at client needs now: Competition in the asset management sector has been a catalyst for new investment strategies in response to changing client needs. This is the third change.

Many investors want to combine search for yield with the desire to limit downside risks and volatility.

Among those who increasingly aim to earn (so-called) alternative risk premia are multi asset funds.

Multi asset funds have been around in various guises for quite some time now, but they have been attracting renewed interest in the current low yield environment.

Let's not forget that there are also other players with more explicit links to volatility. These include

• commodity trading advisors (CTAs) with momentum-driven strategies;

- funds that have volatility targets or (so-called) volatility caps and
- risk parity funds.

Many of their approaches rely on systematic investment strategies.

These strategies promise outperformance or superior risk management by eliminating human bias. They largely lean on automated market data analysis.

But they also imply correlated investments. When volatilities are low, the strategies systematically increase riskier investment positions, and vice versa. Here too, procyclical influence on market liquidity is a central concern.

One factor which many, if not all, of these developments have in common is the relentless drive towards digitalisation.

Big data, machine learning and artificial intelligence have become indispensable for many market participants in the fields of forecasting, investment management and trade execution.

So in a nut shell, we see a lot of changes in the market. These changes will alter the information that is being sent to us. The overall question is how are we going to interpret these signals?

Just think about traditional benchmark rates and also the shape of the yield curve.

No matter which yardstick is taken:

A superficial reading may suggest that the US yield curve is sending strong warning signs about growth and inflation expectations.

In the same vein, the economic outlook implied by the Bund curve seems to look only marginally better.

For all the concerns which the yield curves continue to attract, there are many voices pointing to special factors which dilute the reliability of this indicator.

Increasing demand for high quality assets seems to play an important role – be it from large-scale institutional investors, market participants in need of collateral, or banks aiming to satisfy regulatory requirements.

The dampening impact of monetary policy on term premia is often mentioned as an influence factor as well. I will come back to this point shortly.

Turning to other segments, reliability concerns have also cropped up surrounding market-based inflation expectation indicators such as inflation swaps.

I will not go into an in-depth analysis, the jury is still out on what has been driving down longer-term market indicators.

All the related issues are being continually reassessed by the Eurosystem¹.

Another challenge is to correctly interpret volatility indices like the VIX^2 .

Over the last years, we have seen rather long stretches of low volatility readings.

A common conclusion from these readings is that market participants expect smooth sailing ahead.

But we have to take into account that volatility targeting strategies and related products are a

more important part of the game now.

Volatility readings could have been more suppressed than in prior periods. As a result, market participants face relatively more extreme spikes during a repricing of risk.

So we are talking about the abruptness and magnitude of index movements, rather than the movements themselves.

B – IMPLICATIONS FOR MONETARY POLICY IMPLEMENTATION

Now what is the impact of these changes on monetary policy implementation?

Just like asset management, monetary policy is about taking the right decisions.

That's why it matters a great deal to have a sound grasp of what economic indicators are actually telling us – including financial market indicators.

The yield curve has long been used by market participants to gauge markets' aggregated expectations on the economic outlook.

Getting a grip on inflation expectations touches on the core of our price stability mandate.

But market-based indicators of inflation expectations are just one set of indicators, which can be relevant in this context.

The notion of financial conditions is another factor that has gained in importance for central banks as a means of assessing their policy impact.

Consider that volatility is an important component of practically any measure of [risk and] financial conditions – and you'll see why there might be a problem.

Therefore, one important task for central banks is to separate market technicalities from fundamental information.

And that, in turn, is why central bankers also need to cross-check financial market signals against other indicators, monetary as well as real economic ones.

Inaccurate or incomplete information might lull us into complacency in one situation or drive us to take potentially unnecessary or premature action in another.

At this stage, let me briefly recap on how monetary policy itself impacts on financial market indicators.

Financial market prices play an important role for monetary policy transmission.

In this context, it is also important to understand the Eurosystem's concept of market neutrality for the public sector asset purchase programme (PSPP).

It implies that while we are looking to affect prices, we do not want to suppress the price discovery mechanism $\frac{3}{2}$.

That is why a high degree of transparency around the asset purchases and close monitoring of their impact on liquidity and collateral availability are still fundamental pillars of the Eurosystem's concept.

Against this background, we also have to be aware of "informational feedback loops", also known as the "reflection problem" 4.

Overall, concrete measures are the result of weighing the pros and cons with regard to achieving the price stability target.

CONCLUSION

Ladies and gentlemen,

Let me conclude with a few remarks on this assessment.

The task of the ECB's Governing Council, remember, is to achieve price stability in the euro area in the medium term.

Therefore, the inflation outlook is key for monetary policy decisions. One important element here are inflation projections which will be updated by ECB staff for the September meeting.

After the July meeting, the relevant Eurosystem committees have been tasked with examining different policy options for the case that the Governing Council sees need to act.

The questions they are exploring touch upon the set of policy instruments, their intensity and their timing.

And the Bundesbank is actively contributing to the discussions at all the relevant levels.

As always, a crucial part of decision making will be to correctly interpret financial market signals.

In a constant state of flux, we face the difficult task of filtering out the informational content of market indicators that is relevant for monetary policy.

They cannot be taken at face value, but should be treated as the raw material for monetary policy decisions.

And the word "raw" is certainly worth stressing here, because indicators have to be handled with a great deal of caution. They have to be qualified, quantified and cross-checked.

Thank you for your attention.

Mario Draghi (25 July 2019): "(...) as I've said on another occasion, the informational content of market-based inflation expectations has to be assessed, taking into account certain technical conditions of these markets."

The VIX volatility index measures the volatility of the S&P 500 expected by the market (implied volatility). A high value indicates a volatile market. The VIX is therefore also referred to as the "fear index". However, it does not indicate the direction of change (rising or falling stock prices).

Benoît Cœuré, Embarking on public sector asset purchases, 10 March 2015, www.ecb.europa.eu/press/key/date/2015/html/sp150310 1.en.html

⁴ www.bis.org/publ/work692.pdf